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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,827	08/29/2000	Edward A. Schrock	303.527US2	8668

21186 7590 01/15/2003

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/15/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,827

Applicant(s)

SCHROCK ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-60, 62 and 63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35, 37, 51-60, 62 and 63 is/are allowed.
- 6) ☒ Claim(s) 34, 36 and 38-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 18.
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 16.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. For purposes of completing the record, it should first be pointed out that the previous Examiner noted that (with respect to lines 13-14 on page 6 of the latest amendment and the referenced interview)

"he neither indicated any (amended) claims as being patentable sight unseen nor firmly committed himself to allowing this application; rather, the substance of the interview conducted on 16 October 2002 was constituted by a *discussion* of *possible ways* to amend the claims to be allowable it being agreed that the applied prior art of record did not appear to fairly document some of the material disclosed by applicants in their specification, with the understanding that the examiner had not yet seen the amended claims (i.e. was unaware of the exact changes that applicants would make to the claims), that an updated search would have to be performed and that the Examiner would reconsider his position based upon all of the foregoing."

2. Claims 34, 36 and 38-50 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 34, 36, 38-42 and 44-47 require that a polyimide substrate be used in combination with a hybrid thermoplastic and thermosetting material. The original disclosure however never clearly describes using a polyimide substrate in combination with a hybrid adhesive and applicant has not shown why the original disclosure should be read as describing this. As such, it is submitted that this was not described in the

specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. this is considered to be new matter. In particular, note that the description of the "hybrid adhesive tape" is apparently in the context of a separate and distinct embodiment of the "adhesive tape 40" and there is no clear description that this adhesive has utility with other embodiments, such as the tri-layer adhesive embodiments.

Claim 43 and 48-50 describe that the CTBN/epoxy adhesive is the "hybrid" adhesive. There is however no description of this in the original disclosure and in fact, the original disclosure would seem to contradict this as it explicitly describes that the CTBN/epoxy "is a thermoset material that laminates at approximately 100 deg C". This is thus not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. this is likewise considered to be new matter.

3. Claims 34, 36 and 38-50 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification and above noted claims require an adhesive tape that is a "hybrid material of thermoplastic and thermosetting adhesive" - it however is not clear that this material has been described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make

and/or use the invention. In other words, it does not seem that sufficient information has been provided for the ordinary artisan to be able to determine what the structure and/or compositions of this "hybrid" tape are without an undue burden of experimentation. Note that there has been no indication in the original disclosure of what compounds are suitable and effective in this very specific and highly specialized bonding environment. Further, it is not even clear what is meant by "hybrid" in this context - is it a mixture or blend of thermoplastic and thermosetting adhesives? Or is it a combination of thermoplastic and thermosetting materials in different layers? Or is it a new material of some other structure and/or composition? Lacking more detailed information in this regard, it is submitted that the ordinary artisan would have to resort to an undue burden of experimentation to determine what would work as a hybrid tape and the disclosure is thus considered insufficient to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention consistent with these claims.

4. Claims 34 and 35 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 36 and 37, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Claims 35, 37, 51-60, 62 and 63 are allowed (but note the duplicate claim objection in the preceding paragraph).

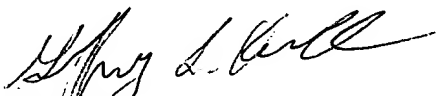
The closest prior art of record fails to teach or suggest the use of a polyamide film coated on both sides with a CTBN/epoxy¹ material for use in a semiconductor attachment or bonding environment.

6. Applicant's arguments filed October 25, 2002 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
January 13, 2003

¹ It is noted that the specification indicates that this tri-layer tape "was developed per Applicant's specifications and is presently produced by Ablestik Electronic Materials & Adhesives under part number RP444-3." There is however no evidence of record that this now commercial material is available as prior art under any section of 35 USC 102.